

patent applications.

It seems that the Examiner acknowledges that the catalogues disclose a great many non-natural or unusual AAs, and considers that disclosure "essential" to practicing the invention without undue experimentation.

In our opinion, the catalogue enumerations are not essential. Chemists are well aware of what amino acids are, and how they are usually made. A specification is not supposed to be a "blueprint".

Even if they are "essential", and the reference at pp. 18-19 is properly characterized as an "improper" incorporation by reference, the proper procedure is not to reject for lack of enablement. Rather, it is to object to the specification as described in MPEP § 608.01(p)(I)(A)(2). Such an obligation may then be overcome by amending the specification to expressly recite the improperly incorporated text.

Accordingly, applicants have amended the specification to insert at page 19, line 3, a table (Reference Table A) of amino acids extracted from the three cited catalogues. The table sets forth the catalogue of origin (col. 3), the catalogue number (col. 1), and the name of the amino acid (col. 2). Claim 76 has been amended to refer to this Reference Table A. The only reference to "non-natural or unusual amino acids" in claim 18 is in clause I, however, those positions are already limited by lines 6-14 of the claim.

You will note that the selected amino acids are divided in four groups: aliphatic (Al), aromatic (Ar), basic (Ba) and acid/amide (Acm). In these four groups you will find non-natural or unusual amino acids from the catalogues which can be used as substituent(s) at relevant residues in the sequence AYMTMKIRN which can be symbolized by AlArAlAlAlBaAlBaAcm.

Thus, if identification of the contemplated non-natural or unusual AAs is "essential", the specification provides it, and

the amendment does not add new matter as the specification originally directed the reader to the three catalogues in question.

Pursuant to MPEP §608.01(p) (I) (A) (2), we hereby declare that the amendatory material consists of material previously incorporated by reference through the citation of the three catalogues in question.

2. Scope of Enablement/Peptides up to 30 AAs long (OA §4b)

The Examiner has conceded enablement for peptides of 6-20 amino acids (claim 18). Claim 22 has now been so amended, and claim 23 cancelled as inconsistent with base claim 18. Hence, this rejection is now moot.

3. Scope of Enablement/Method of Preventing or Treating (OA §4c)

The Examiner concedes that the specification is enabling for treatment of IL-10-mediated diseases other than pancreatitis, but maintains the rejection of claims 49-52, 61 and 62 insofar as they recite "prevention".

Claim 49 has been amended to avoid reference to "prevention". Claim 50 never did recite "prevention" and hence should not have been rejected. Claims 51, 52, 61 and 62 are dependent directly or indirectly on 49, and hence are "cleared" by 49's amendment.

Nonetheless, coverage of "prevention" is still sought (see Supplemental Amendment).

4. Description/New Matter Rejection to Methionine-S-Oxide and L-Dab (OA §5a)

Claim 18 was amended to recite that X_4 and/or X_5 could be "methionine-S-oxide" or that X_6 could be "L-Dab". The Examiner

rejects these additions for lack of description.

These AAs were cited in the catalogues. Hence, if that citation qualifies as an incorporation by reference --for which see pp. 10-11 of the last response-- there is not a "new matter" problem. Rather, the recitation of the subject matter in the claims renders it more likely to be "essential material", warranting an "improper incorporation by reference" objection to the specification. Reference Table A, compiled from the cited catalogues, expressly lists both methionine-S-oxide. (Novabiochem catalogue no. 04-11-0061) and L-Dab (2,4-diaminobutyric acid) (Bachem catalogue F3050).

Nonetheless, new claim 82 (of the supplemental amendment) excludes both methionine-S-oxide and L-Dab.

5. Miscellaneous

Claim 22 has been amended to resolve the inconsistency between reciting that it comprised SEQ ID NO:19 and reciting that one or more of the Thr, Lys and Arg of SEQ ID NO:19 were replaced. Claim 76 has been amended to resolve inconsistent definitions of X_A , X_B , X_C , X_4 , X_5 and X_6 . The definitions kept are consistent with the description of claim 76 on page 15 of the July 11, 2001 amendment.

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Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made".

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification

On page 18, line 3, please insert the enclosed "Reference Table A".

In the claims:

Claim 23 has been cancelled.

Claims 22, 49 and 76 have been amended as follows:

22 (amended). A polypeptide amounting [up to about 30] to six to twenty amino acids which comprises the following sequence

Thr-X₄-Lys-X₅-Arg-X₆ (SEQ ID NO:19),

wherein

X₄ and X₅ are independently selected from the group consisting of Met, Ile, Leu and Val; and

X₆ is selected from the group consisting of Asn, Asp, Gln and Glu,

or which comprises a sequence which differs from SEQ ID NO:19 solely in that [wherein] at least one of Thr, Lys, and Arg in SEQ ID NO:19 is independently substituted with a non-natural or unusual amino acid selected from the group consisting of the amino acids of Reference Table A,

said polypeptide having at least one of the properties defined in claim 18.

49 (amended). A method of [preventing or] treating a disease which is [preventable or] treatable by a substance which has at least one of the following properties,

a) induces inhibition of spontaneous IL-8 production by human monocytes,

b) induces inhibition of IL-1 β induced IL-8 production by human peripheral blood mononuclear cells (PBMC),

c) induces production of interleukin-1 receptor antagonistic protein (IRAP) by human monocytes,

d) induces chemotactic migration of CD8+ human T lymphocytes in vitro,

e) desensitizes human CD8+ T cells resulting in an unresponsiveness towards rhIL-10,

f) suppresses the chemotactic response of CD4+ T human lymphocytes towards IL-8,

g) suppresses the chemotactic response of human monocytes towards MCAF/MCP-1,

h) inhibits class II MHC molecule expression on human monocytes stimulated by IFN- γ ,

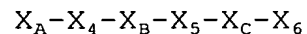
i) induces the production of IL-4 by cultured normal human CD4+ T cells,

j) reduces the TNF α production in human mixed leukocyte reaction, or

k) downregulates TNF α and IL-8 production in a rabbit model of bile acid induced acute pancreatitis and reduces neutrophil infiltration in the lungs of the treated rabbits

which comprises administering to a subject in need thereof a pharmaceutically effective amount of a pharmaceutical composition according to claim 41.

76 (amended). A non-naturally occurring polypeptide, or a polypeptide in at least partially purified form, which is six to 20 amino acids in length, and which comprises the following sequence



[wherein X_4 and X_5 are independently selected from the group consisting of Met, Ile, Leu, Val, norvaline, norleucine, methionine-S-oxide, N-methylvaline, N-methyl isoleucine, allo-leucine, and their D-isomers;

X_6 is selected from the group consisting of Asn, Asp, Gln, Glu, and their D-isomers,]

X_A is L-Thr or a non-natural or unusual amino acid,

X_B is L-Lys or a non-natural or unusual amino acid,

X_C is L-Arg or a non-natural or unusual amino acid,
X₄ and X₅ are independently selected from the group consisting of L-Met, L-Ile, L-Leu, L-Val and a non-natural or unusual amino acid,

X₆ is L-Asn, L-Asp, L-Gln, L-Glu, or a non-naturally or unusual amino acid,

no more than one of X_A, X_B, X_C, X₄, X₅ and X₆ is a non-natural or unusual amino acid other than the D-isomer of an L-amino acid recited as possible at that position,

wherein at least one of the following conditions (I)-(V) is true:

I) at least one of X_A, X_B, X_C, X₄, X₅ or X₆ is a non-natural or unusual amino acid,

II) the polypeptide is cyclized,

III) the polypeptide is stabilized,

IV) the aminoterminal amino acid residue is acylated, or

V) the carboxyterminal amino acid residue is amidated,

where, if the polypeptide is not cyclized, said sequence corresponds essentially to the C-terminal of said polypeptide, said polypeptide having at least one of the following properties:

a) induces inhibition of spontaneous IL-8 production by human monocytes,

b) induces inhibition of IL-1 β induced IL-8 production by human peripheral blood mononuclear cells (PBMC),

c) induces production of interleukin-1 receptor antagonistic protein (IRAP) by human monocytes,

d) induces chemotactic migration of CD8+ human T lymphocytes in vitro,

e) desensitizes human CD8+ T cells resulting in an unresponsiveness towards rhIL-10,

f) suppresses the chemotactic response of CD4+ T human lymphocytes towards IL-8,

g) suppresses the chemotactic response of human monocytes towards MCAF/MCP-1,

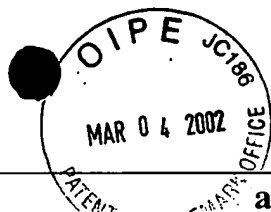
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h) inhibits class II MHC molecule expression on human monocytes stimulated by IFN- γ ,

i) induces the production of IL-4 by cultured normal human CD4+ T cells,

j) reduces TNF α production in human mixed leukocyte reaction, or

k) downregulates TNF α and IL-8 production in a rabbit model of bile acid induced acute pancreatitis and reduces neutrophil infiltration in the lungs of the treated rabbits, and wherein any non-natural or unusual amino acid referred to above is an amino acid set forth in reference table A.



| aliphatic | | |
|------------|------------------------|-------------|
| 04-10-0002 | H-D-Ala-OH | Novabiochem |
| 04-10-0004 | H-βAla-OH | Novabiochem |
| 04-11-0050 | C-All-L-Ala | Novabiochem |
| 04-12-9001 | H-MeAla-OH | Novabiochem |
| 04-13-9005 | H-D-MeAla-OH | Novabiochem |
| 04-12-8000 | Ac-Ala-OH | Novabiochem |
| 04-13-8000 | Ac-D-Ala-OH | Novabiochem |
| 04-12-8001 | Ac-βAla-OH | Novabiochem |
| 04-12-5039 | Benzoyl-Ala-OH | Novabiochem |
| 04-13-5003 | Benzoyl-D-Ala-OH | Novabiochem |
| 04-12-0510 | Z-Ala-OH | Novabiochem |
| 04-13-0500 | Z-D-Ala-OH | Novabiochem |
| 04-12-0532 | Z-βAla-OH | Novabiochem |
| 04-13-9000 | Z-D-MeAla-OH | Novabiochem |
| 04-12-9003 | Z-MeAla-OH | Novabiochem |
| 05-22-2506 | For-Ala-OH | Novabiochem |
| 04-12-5225 | p-Nitrobenzoyl-βAla-OH | Novabiochem |
| 04-11-0021 | H-Abu-OH | Novabiochem |
| 04-11-0046 | H-γ-Abu-OH | Novabiochem |
| 04-12-0533 | Z-Abu-OH | Novabiochem |
| 04-12-0629 | Z-γ-Abu-OH | Novabiochem |
| 04-11-0044 | H-εAhx-OH | Novabiochem |
| 04-12-0534 | Z-εAhx-OH | Novabiochem |
| 04-11-0047 | H-Aib-OH | Novabiochem |
| 04-11-0016 | L-β-t-Butylglycine | Novabiochem |
| 04-11-0017 | D-β-t-Butylglycine | Novabiochem |
| 04-11-0060 | H-L-Cit-OH | Novabiochem |
| 04-11-0035 | H-D-Cha-OH | Novabiochem |
| 04-11-0049 | C-All-L-Gly | Novabiochem |
| 04-12-8006 | Ac-Gly-OH | Novabiochem |
| 04-12-0509 | Z-Gly-OH | Novabiochem |
| 04-15-0002 | Cap-Gly-OH | Novabiochem |
| 04-15-0003 | Lau-Gly-OH | Novabiochem |
| 04-15-0001 | Myr-Gly-OH | Novabiochem |
| 04-15-0004 | Pal-Gly-OH | Novabiochem |
| 04-12-5233 | N-Phenyl-Gly-OH | Novabiochem |
| 04-15-0005 | Ste-Gly-OH | Novabiochem |
| 04-12-5237 | Trt-Gly-OH | Novabiochem |
| 04-10-0018 | H-His-OH | Novabiochem |
| 04-10-0059 | H-D-His-OH | Novabiochem |
| 04-10-0020 | H-Hyp-OH | Novabiochem |
| 04-12-9004 | H-Melle-OH | Novabiochem |
| 04-12-8010 | Ac-Ile-OH | Novabiochem |
| 04-12-0522 | Z-Ile-OH (oil) | Novabiochem |

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| 05-22-2507 | For-Ile-OH | Novabiochem |
| 04-12-9000 | Z-Melle-OH | Novabiochem |
| 04-10-0056 | H-D-Leu-OH | Novabiochem |
| 04-12-9006 | H-MeLeu-OH | Novabiochem |
| 04-11-0067 | H-Leu(γ Me)-OH | Novabiochem |
| 04-12-8012 | Ac-Leu-OH | Novabiochem |
| 04-13-8002 | Ac-D-Leu-OH | Novabiochem |
| 04-12-0501 | Z-Leu-OH (oil) | Novabiochem |
| 04-13-0512 | Z-D-Leu-OH (oil) | Novabiochem |
| 04-12-9008 | Z-MeLeu-OH | Novabiochem |
| 04-10-0028 | H-D-Met-OH | Novabiochem |
| 04-11-0061 | H-Met(O)-OH | Novabiochem |
| 04-11-0019 | H-Nle-OH | Novabiochem |
| 04-11-0041 | H-D-Nle-OH | Novabiochem |
| 04-11-0020 | H-Nva-OH | Novabiochem |
| 04-11-0042 | H-D-Nva-OH | Novabiochem |
| 04-11-0031 | H-Pen-OH | Novabiochem |
| 04-11-0032 | H-D-Pen-OH | Novabiochem |
| 04-10-0036 | H-Pro-OH | Novabiochem |
| 04-10-0037 | H-D-Pro-OH | Novabiochem |
| 04-11-0008 | Thioprolin | Novabiochem |
| 04-11-0062 | H-Sar-OH | Novabiochem |
| 04-12-0581 | Z-Sar-OH | Novabiochem |
| 04-11-0015 | Statine | Novabiochem |
| 04-11-0059 | ACHPA | Novabiochem |
| 04-11-0058 | AHPPA | Novabiochem |
| 04-12-5262 | H-Thr-(Bzl)-OH | Novabiochem |
| 04-12-5003 | H-Thr-(tBu)-OH | Novabiochem |
| 04-12-0589 | Z-Thr(Bzl)-OH | Novabiochem |
| 04-12-0502 | Z-Thr(tBu)-OH.DCHA | Novabiochem |
| 04-10-0049 | H-D-Val-OH | Novabiochem |
| 04-11-0051 | H-D-Val(β OH)-OH | Novabiochem |
| 04-12-9017 | H-MeVal-OH | Novabiochem |
| 04-13-9009 | H-D-MeVal-OH.HCl | Novabiochem |
| 04-12-8029 | Ac-Val-OH | Novabiochem |
| 04-13-8011 | Ac-D-Val-OH | Novabiochem |
| 04-12-0507 | Z-Val-OH | Novabiochem |
| 04-13-0523 | Z-D-Val-OH | Novabiochem |
| 04-12-9019 | Z-MeVal-OH | Novabiochem |
| 04-11-0003 | L-Carnitine | Novabiochem |
| F-2740 | L- α -aminosuberic acid | Bachem |
| F-1425 | H- β -Chloro-Ala-OH | Bachem |
| F-1460 | H- β -Cyano-Ala-OH | Bachem |
| F-2500 | H- β -Cyclohexyl-Ala-OH.HCl | Bachem |

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| F-2505 | H- β -Cyclohexyl-D-Ala-OH.HCl | Bachem |
| F-1470 | H- β -(1-Cyclopentenyl)-DL-Ala-OH | Bachem |
| F-1465 | H- β -Cyclopentyl-DL-Ala-OH | Bachem |
| F-1475 | L-Cycloserine | Bachem |
| F-1480 | D-Cycloserine | Bachem |
| F-2985 | H-4,5-Dehydro-Leu-OH | Bachem |
| F-1490 | H-3,4-Dehydro-Pro-OH | Bachem |
| F-1160 | H-allo-Ile-OH | Bachem |
| F-1165 | H-D-allo-Ile-OH | Bachem |
| F-1175 | H-allo-Thr-OH | Bachem |
| F-1180 | H-D-allo-Thr-OH | Bachem |
| F-2540 | H-allo-Thr(tBu)-OH | Bachem |
| F-1205 | 7-Aminoheptanoic acid | Bachem |
| F-1281 | L-Azetidine-2-carboxylic acid | Bachem |
| F-2285 | Azetidine-3-carboxylic acid | Bachem |
| F-2395 | H- α -Difluoro-Me-DL-Orn-OH | Bachem |
| F-2530 | H- β -Fluoro-DL-Ala-OH | Bachem |
| B-1910 | Fmoc- γ -Abu-OH | Bachem |
| F-2780 | H-Homoarg-OH | Bachem |
| F-1625 | H-Homopro-OH | Bachem |
| F-1630 | H-D-Homopro-OH | Bachem |
| F-1765 | N-Me-Aib-OH | Bachem |
| F-1800 | H- α -Me-DL-Leu-OH | Bachem |
| F-2895 | H-Met(O ₂)-OH | Bachem |
| F-2550 | Myristoyl-Gly-OH | Bachem |
| F-1315 | H-Neopentylgly-OH | Bachem |
| F-1320 | H-D-Neopentylgly-OH | Bachem |
| F-2040 | H-Propargyl-Gly-OH | Bachem |
| F-2900 | H-D-Propargyl-Gly-OH | Bachem |
| C-1535 | Z-dehydro-Ala-OH | Bachem |
| FA02901 | Fmoc-D-2-aminobutyric acid | Neosystem |
| AA03001 | H-4-aminobutyric acid | Neosystem |
| AA03201 | H-8-aminocaprylic acid | Neosystem |
| FA03301 | Fmoc-1-amino-1-cyclohexane carboxylic acid | Neosystem |
| FA12101 | Fmoc-(3S,4S,5S)-4-amino-3-hydroxy-5-methyl-heptanoic acid | Neosystem |
| BA03804 | Boc-(3S,4S)-4-amino-3-hydroxy-5-(4-benzyloxyphenyl)-pentanoic acid | Neosystem |
| FA03103 | Fmoc-(3S,4S)-4-amino-3-hydroxy-6-methylthio-hexanoic acid | Neosystem |
| AA03601 | H-2-aminoisobutyric acid | Neosystem |
| AA05201 | H-D-2-aminovaleric acid | Neosystem |
| AA05202 | H-L-2-aminovaleric acid | Neosystem |
| FA03801 | Fmoc-5-aminovaleric acid | Neosystem |
| FA04102 | Fmoc-L- α -t-butylglycine | Neosystem |

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| FA09401 | Fmoc-(4-carboxymethyl)-piperidine | Neosystem |
| FA11701 | (R,S)-Fmoc-2-carboxymorpholine | Neosystem |
| FA02301 | Fmoc- β -cyclohexyl-D-alanine | Neosystem |
| FA02302 | Fmoc- β -cyclohexyl-L-alanine | Neosystem |
| FA11901 | Fmoc-D-homoleucine | Neosystem |
| FA11902 | Fmoc-L-homoleucine | Neosystem |
| AA04802 | H-L-hydroxyproline | Neosystem |
| FA04804 | Fmoc-O-t-butyl-L-hydroxyproline | Neosystem |
| FA09001 | Fmoc-isonipecotic acid | Neosystem |
| FA01220 | Fmoc-L-Lys(Biotin)-OH | Neosystem |
| AA05101 | H-D-norleucine | Neosystem |
| AA05102 | H-L-norleucine | Neosystem |
| AA05201 | H-D-norvaline | Neosystem |
| AA05202 | H-L-norvaline | Neosystem |
| AA08602 | H-L-ornithine.HCl | Neosystem |
| AA00811 | H-sarcosine | Neosystem |
| FA08901 | Fmoc-statine | Neosystem |
| FA06502 | Fmoc-L-thiazolidine-4-carboxylic acid | Neosystem |
| FA09701 | Fmoc-tranexamic acid | Neosystem |
| FB02301 | (3S)-Fmoc-3-amino-1-carboxymethyl-caprolactame | Neosystem |
| FB02801 | (2S,6S,9S)-Fmoc-6-amino-2-carboxymethyl-3,8-diazabicyclo-[4,3,0]-nonane-1,4-dione | Neosystem |
| FB02601 | Fmoc-BTD | Neosystem |
| FB02101 | Fmoc-"Freidinger's lactame" | Neosystem |
| BB01502 | Boc-Pro- ψ [CH ₂ N(2-Cl-Z)]-Gly-OH | Neosystem |
| | | |
| aromatic | | |
| 04-11-0066 | H-Nal-OH | Novabiochem |
| 04-11-0001 | H-D-Nal-OH | Novabiochem |
| 04-10-0032 | H-D-Phe-OH | Novabiochem |
| 04-11-0054 | H-Phe(pCl)-OH | Novabiochem |
| 04-11-0048 | H-D-Phe(pCl)-OH | Novabiochem |
| 04-11-0024 | H-Phe(2F)-OH | Novabiochem |
| 04-11-0025 | H-Phe(3F)-OH | Novabiochem |
| 04-11-0026 | H-Phe(pF)-OH | Novabiochem |
| 04-12-7500 | H- α -Me-Phe-OH | Novabiochem |
| 04-12-9009 | H-MePhe-OH | Novabiochem |
| 04-13-9007 | H-D-MePhe-OH. HCl | Novabiochem |
| 04-11-0045 | H-Phe(NO ₂)-OH. H ₂ O | Novabiochem |
| 04-12-8018 | Ac-Phe-OH | Novabiochem |
| 04-13-8005 | Ac-D-Phe-OH | Novabiochem |
| 04-12-5139 | Benzoyl-Phe-OH | Novabiochem |
| 04-13-5031 | Benzoyl-D-Phe-OH | Novabiochem |

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| 04-12-0500 | Z-Phe-OH | Novabiochem |
| 04-13-0516 | Z-D-Phe-OH | Novabiochem |
| 04-12-9021 | Z-MePhe-OH | Novabiochem |
| 04-10-0034 | H-Phg-OH | Novabiochem |
| 04-10-0035 | H-D-Phg-OH | Novabiochem |
| 04-11-0029 | D-(-)-Dihydrophenylglycine | Novabiochem |
| 04-12-0575 | Z-Phg-OH | Novabiochem |
| 04-11-0062 | H-Tic-OH | Novabiochem |
| 04-11-0063 | H-Tic(OH)-OH. 2H ₂ O | Novabiochem |
| 04-11-0036 | H-Thi-OH | Novabiochem |
| 04-10-0043 | H-Trp-OH | Novabiochem |
| 04-10-0044 | H-D-Trp-OH | Novabiochem |
| 04-11-0038 | 5-Hydroxy-L-Trp-OH | Novabiochem |
| 04-12-5186 | H-Trp(Boc)-OH | Novabiochem |
| 04-13-5066 | H-D-Trp(Boc)-OH | Novabiochem |
| 04-10-0047 | H-D-Tyr-OH | Novabiochem |
| 04-11-0014 | H-Tyr(3',5'-di-I)-OH | Novabiochem |
| 04-12-5013 | H-Tyr(Bzl)-OH | Novabiochem |
| 04-12-5012 | H-Tyr(tBu)-OH | Novabiochem |
| 04-13-5056 | H-D-Tyr(tBu)-OH | Novabiochem |
| F-1305 | H-p-Bromo-Phs-OH | Bachem |
| F-2800 | H-p-Bz-Phe-OH | Bachem |
| F-2810 | H-p-Bz-D-Phe-OH | Bachem |
| F-1445 | H-p-Chloro-Phe-OH | Bachem |
| F-2520 | H-p-Chloro-D-Phe-OH | Bachem |
| F-1200 | H-4-Amino-3,5-diiodo-Phe-OH | Bachem |
| F-1225 | H-p-Amino-Phe-OH. HCl | Bachem |
| F-2855 | H-p-Amino-D-Phe-OH. HCl | Bachem |
| F-2490 | H-β-(3-Benzothienyl)-Ala-OH | Bachem |
| F-2485 | H-β-(3-Benzothienyl)-D-Ala-OH | Bachem |
| F-1520 | H-3,5-Dibromo-Tyr-OH | Bachem |
| F-2225 | H-3,5-Diiodo-Tyr-OH | Bachem |
| F-3005 | H-3,5-Diiodo-D-Tyr-OH | Bachem |
| F-1530 | H-p-Fluoro-Phe-OH | Bachem |
| F-2320 | H-p-Fluoro-D-Phe-OH | Bachem |
| F-2135 | H-m-Fluoro-DL-Phe-OH | Bachem |
| B-2360 | Fmoc-p-azido-Phe-OH | Bachem |
| B-2220 | Fmoc-p-Bz-Phe-OH | Bachem |
| F-1610 | H-Homophe-OH | Bachem |
| F-1615 | H-D-Homophe-OH | Bachem |
| F-1670 | H-p-iodo-D-Phe-OH | Bachem |
| F-1675 | H-p-iodo-DL-Phe-OH | Bachem |
| E-3150 | H-α-Me-Phe-OH | Bachem |

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| F-3115 | H- α -Me-D-Phe-OH | Bachem |
| F-1810 | H- α -Me-DL-Trp-OH | Bachem |
| F-2820 | H- β -(2-Pyridyl)-Ala-OH | Bachem |
| F-2790 | H- β -(2-Pyridyl)-D-Ala-OH | Bachem |
| FA02601 | Fmoc-2-aminobenzoic acid | Neosystem |
| FA02801 | Fmoc-4-aminobenzoic acid | Neosystem |
| FA12401 | Fmoc-3-amino-1-carboxymethyl-pyridin-2-one | Neosystem |
| BA03805 | Boc-(3S,4S)-4-amino-3-hydroxy-5-(3-indolyl)-pentanoic acid | Neosystem |
| BA03701 | Boc-(3S,4S)-4-amino-3-hydroxy-5-phenyl-pentanoic acid | Neosystem |
| FA08801 | Fmoc-2-aminoindane-2-carboxylic acid | Neosystem |
| FA02702 | Fmoc-(3-aminomethyl)-benzoic acid | Neosystem |
| FA09201 | Fmoc-(D,L)-2-aminotetraline-2-carboxylic acid | Neosystem |
| FA01406 | Fmoc-4-bromo-D-phenylalanine | Neosystem |
| FA01407 | Fmoc-4-bromo-L-phenylalanine | Neosystem |
| FA05602 | Fmoc-4-chloro-L-phenylalanine | Neosystem |
| FA05701 | Fmoc-3,4-dichloro-D-phenylalanine | Neosystem |
| FA05702 | Fmoc-3,4-dichloro-L-phenylalanine | Neosystem |
| FA11801 | (R,S)-Fmoc-1,3-dihydro-2H-isoindole carboxylic acid | Neosystem |
| FA05801 | Fmoc-4-fluoro-D-phenylalanine | Neosystem |
| FA05802 | Fmoc-4-fluoro-L-phenylalanine | Neosystem |
| FA05002 | Fmoc-L-indoline-2-carboxylic acid | Neosystem |
| FA01221 | Fmoc-L-Lys(Dabcyl)-OH | Neosystem |
| FA01410 | Fmoc-4-methyl-D-phenylalanine | Neosystem |
| FA01411 | Fmoc-4-methyl-L-phenylalanine | Neosystem |
| FA02506 | Fmoc-D-1-naphthylalanine | Neosystem |
| FA02505 | Fmoc-L-1-naphthylalanine | Neosystem |
| FA02503 | Fmoc-D-2-naphthylalanine | Neosystem |
| FA02504 | Fmoc-L-2-naphthylalanine | Neosystem |
| FA06001 | Fmoc-4-nitro-D-phenylalanine | Neosystem |
| FA06002 | Fmoc-4-nitro-L-phenylalanine | Neosystem |
| FA07102 | Fmoc-3-nitro-L-tyrosine | Neosystem |
| FA09801 | Racemic Fmoc-trans-3-phenylazetidine-2-carboxylic acid | Neosystem |
| FA08001 | Fmoc-D-3-pyridylalanine | Neosystem |
| FA08002 | Fmoc-L-3-pyridylalanine | Neosystem |
| FA09501 | Fmoc-D-tetrahydroisoquinoline-2-carboxylic acid | Neosystem |
| FA09502 | Fmoc-L-tetrahydroisoquinoline-2-carboxylic acid | Neosystem |
| AA06601 | 1,2,3,4-D-tetrahydroisoquinoline-3-carboxylic acid | Neosystem |
| AA06602 | 1,2,3,4-L-tetrahydroisoquinoline-3-carboxylic acid | Neosystem |
| FA12501 | Fmoc-L-1,2,3,4-tetrahydronorharman-3-carboxylic acid | Neosystem |
| FA02501 | Fmoc- β -(2-thienyl)-D-alanine | Neosystem |
| FA02502 | Fmoc- β -(2-thienyl)-L-alanine | Neosystem |
| FB02201 | (R,S)-Fmoc-3-amino-N-1-carboxymethyl-2-oxo-5-phenyl-1,4-benzodiazepine | Neosystem |
| FB02401 | (R,S)-Fmoc-3-amino-1-carboxymethyl-2,3,4,5-tetrahydro-1H- | Neosystem |

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| | [1]-benzazepine-2-one | |
| FB02501 | Fmoc-3-(2-aminoethyl)-1-carboxymethyl-quinazoline-2,4-dione | Neosystem |
| FB02701 | (2S,5S)-Fmoc-5-amino-1,2,4,5,6,7-hexahydro-azepino [3,2,1-hi] indole-4-one-2-carboxylic acid | Neosystem |
| | | |
| basic | | |
| 04-11-9024 | H-Arg(OH)-OH. AcOH | Novabiochem |
| 04-11-9022 | H-Arg(Me)-OH. AcOH | Novabiochem |
| 04-11-9023 | H-D-Arg(Me)-OH. AcOH | Novabiochem |
| 04-10-0060 | H-D-Lys-OH | Novabiochem |
| 04-10-0030 | H-Orn-OH. HCl | Novabiochem |
| 04-10-0066 | H-D-Orn-OH. HCl | Novabiochem |
| F-3050 | L- α , γ -Diaminobutyric acid. 2HCl | Bachem |
| F-3055 | D- α , γ -Diaminobutyric acid. 2HCl | Bachem |
| F-1505 | 2,6-Diaminopimelic acid (LL, DD and meso) | Bachem |
| F-3040 | L- α , β -Diaminopropionic acid. HCl | Bachem |
| F-3045 | D- α , β -Diaminopropionic acid. HCl | Bachem |
| FA12001 | Fmoc-4-(2-aminoethyl)-1-carboxymethyl-piperazine dihydrochloride | Neosystem |
| FA09301 | N,N-bis(N'-Fmoc-3-aminopropyl)-glycine potassium hemisulfate | Neosystem |
| FA11601 | Fmoc-4-carboxymethyl-piperazine | Neosystem |
| FA00804 | N- α -Fmoc-N- α' -Boc-diaminoacetic acid | Neosystem |
| BA03904 | N- α -Boc-N- γ -Fmoc-L-diaminobutyric acid | Neosystem |
| FA03904 | N- α -Fmoc-N- γ -Boc-L-diaminobutyric acid | Neosystem |
| BA04005 | N- α -Boc-N- β -Fmoc-D-diaminopropionic acid | Neosystem |
| BA04006 | N- α -Boc-N- β -Fmoc-L-diaminopropionic acid | Neosystem |
| FA04004 | N- α -Fmoc-N- β -Boc-L-diaminopropionic acid | Neosystem |
| BB01102 | Boc-Leu- ψ (CH ₂ NH)-Phe-OH | Neosystem |
| BB01401 | Boc-Phe- ψ (CH ₂ NH)-Phe-OH | Neosystem |
| BB01501 | Boc-Pro- ψ (CH ₂ NH)-Gly-OH | Neosystem |
| | | |
| acidic/amide | | |
| 04-11-0070 | H-Asu-OH. HCl | Novabiochem |
| 04-10-0009 | H-D-Asn-OH. H ₂ O | Novabiochem |
| 04-10-0011 | H-D-Asp-OH | Novabiochem |
| 04-10-0016 | H-D-Glu-OH | Novabiochem |
| 04-10-0058 | H-D-Gln-OH | Novabiochem |
| 04-12-5261 | H-Lys(Ac)-OH | Novabiochem |
| 04-12-5117 | H-Lys(Boc)-OH | Novabiochem |
| 04-12-5022 | H-Lys(Z)-OH | Novabiochem |
| 04-13-5052 | H-D-Lys(Z)-OH | Novabiochem |

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| 04-12-5245 | H-Lys(Tfa)-OH | Novabiochem |
| 04-12-5283 | H-Orn(Boc)-OH | Novabiochem |
| 04-13-5021 | H-D-Orn(Boc)-OH | Novabiochem |
| 04-12-5134 | H-Orn(Z)-OH | Novabiochem |
| F-2560 | L- α -Aminoadipic acid | Bachem |
| F-2575 | D- α -Aminoadipic acid | Bachem |
| F-3150 | L- α -Aminoadipic acid - δ -t-butylester | Bachem |
| F-2030 | H-Ser(PO ₃ H ₂)-OH | Bachem |
| F-2035 | H-D-Ser(PO ₃ H ₂)-OH | Bachem |
| FA04008 | N- α -Fmoc-N- β -Z-L-diaminopropionic acid | Neosystem |
| ZA04006 | N- α -Z-N- β -Fmoc-L-diaminopropionic acid | Neosystem |
| FB01501 | Fmoc-(S,S)-[Pro-Leu]-spirolactame | Neosystem |
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- Novabiochem, 1994/1995 Catalogue (Calbiocem-Novabiocem AG, Weidenmattweg 4, CH-4448 Läufelfinden/Switzerland, Pages 65-125)
- Bachem Feinchemikalien AG 1995 Katalog (Bachem Feinchemikalien AG, Hauptstraße 144, CH-4416 Bubendorf/Switzerland), Pages 753-831
- Neosystem Laboratoire Catalogue 1997/98 (Neosystem Laboratoire, 7 rue de Boulogne, 67100 Strasbourg, France) Pages 131-176